

Claims

- [c1] 1. A bicycle display apparatus that displays cumulative information produced from a bicycle-related running condition, wherein the apparatus comprises:
a computing component that calculates the cumulative information, wherein the computing component is structured for attachment to the bicycle, and wherein the computing component includes an information output for outputting the calculated cumulative information;
and
a separate display component including an information input that receives the cumulative information calculated by the computing component, wherein the display component displays the cumulative information calculated by the computing component.
- [c2] 2. The apparatus according to claim 1 wherein the computing component comprises a cumulative information memory for periodically storing the cumulative information calculated by the computing component.
- [c3] 3. The apparatus according to claim 1 wherein the display component is structured to be detachably attached to the bicycle.

- [c4] 4. The apparatus according to claim 1 wherein power is communicated from the computing component to the display component through the information output and the information input.
- [c5] 5. The apparatus according to claim 4 wherein the power and the information calculated by the computing component are communicated from the computing component to the display component through a single communication line.
- [c6] 6. The apparatus according to claim 5 wherein the power and the information calculated by the computing component are communicated from the computing component to the display component in one way only through the communication line.
- [c7] 7. The apparatus according to claim 1 wherein the computing component uses rotation information from a rotating member on the bicycle to calculate the cumulative information.
- [c8] 8. The apparatus according to claim 7 wherein the rotation information comprises rotation of a bicycle wheel.
- [c9] 9. The apparatus according to claim 8 wherein the rotation information comprises signals from an alternating

current generator that rotates with the bicycle wheel.

- [c10] 10. The apparatus according to claim 7 wherein the cumulative information comprises a total distance traveled by the bicycle.
- [c11] 11. The apparatus according to claim 1 wherein the display component comprises a start input component for initiating computation of additional cumulative information.
- [c12] 12. The apparatus according to claim 11 wherein the display component further comprises a cumulative information memory for storing the cumulative information communicated from the computing component.
- [c13] 13. The apparatus according to claim 12 wherein the display component stores the cumulative information communicated from the computing component in the cumulative information memory as reference cumulative information in response to operation of the start input component.
- [c14] 14. The apparatus according to claim 13 wherein the display component calculates additional cumulative information using the reference cumulative information and subsequent cumulative information communicated from the computing component.

- [c15] 15. The apparatus according to claim 14 wherein the display component is structured to display the additional cumulative information.
- [c16] 16. The apparatus according to claim 15 wherein the display component is structured to display the cumulative information communicated from the computing component.
- [c17] 17. The apparatus according to claim 16 wherein display component further comprises a display switching component for alternately displaying the cumulative information communicated from the computing component and the additional cumulative information.
- [c18] 18. A display apparatus comprising:
a display component structured to be attached to a bicycle;
a receiver for receiving cumulative information produced by a computing component from a bicycle-related running condition;
a reference information memory for storing first reference information;
a start input component for initiating computation of first additional cumulative information;
wherein the display component calculates the first addi-

tional cumulative information using the first reference information and subsequent cumulative information communicated from the computing component to the display component; and
wherein the display component is structured to display the first additional cumulative information.

[c19] 19. The apparatus according to claim 18 further comprising a case member structured to be detachably attached to a bicycle mounting bracket and having a housing space adapted to house at least the display component.

[c20] 20. The apparatus according to claim 18 wherein the first reference information comprises the cumulative information.

[c21] 21. The apparatus according to claim 20 wherein the first additional cumulative information is calculated by performing a subtraction with the subsequent cumulative information and the first reference information.

[c22] 22. The apparatus according to claim 21 wherein the cumulative information comprises total distance traveled by the bicycle, and wherein the first additional cumulative information comprises travel distance.

[c23] 23. The apparatus according to claim 22 wherein the

display component is structured to display the total distance traveled by the bicycle and the travel distance.

[c24] 24. The display apparatus according to claim 18 further comprising a reference information input component for inputting second reference information.

[c25] 25. The display apparatus according to claim 24 wherein the display component calculates second additional cumulative information from the first additional cumulative information and the second reference information.

[c26] 26. The apparatus according to claim 25 wherein the second additional cumulative information is calculated by performing a subtraction with the first additional cumulative information and the second reference information.

[c27] 27. The apparatus according to claim 26 wherein the cumulative information comprises total distance traveled by the bicycle, wherein the first additional cumulative information comprises travel distance, wherein the second reference information comprises a target travel distance, and wherein the second additional cumulative information comprises remaining travel distance.

[c28] 28. The apparatus according to claim 27 wherein the display component is structured to display the total dis-

tance traveled by the bicycle, the travel distance, and the remaining travel distance.